

Sub  
B1  
  
A2

46. (New) A synthetic gene encoding a protein normally expressed in an eukaryotic cell wherein at least one rarely-used or less preferred codon in a natural gene encoding said protein has been replaced by a preferred codon encoding the same amino acid, said synthetic gene expressing said protein at a level which is higher than that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.

47. (New) An expression vector comprising the synthetic gene of claim 46.

48. (New) A mammalian cell comprising the synthetic gene of claim 47.

Sub  
B2

49. (New) A method for preparing a synthetic gene encoding a protein normally expressed by mammalian cells, comprising identifying rarely-used and less-preferred codons in the natural gene encoding said protein and replacing one or more of said rarely-used or less-preferred codons with a preferred codon encoding the same amino acid as the replaced codon, so that a synthetic gene is prepared.

#### REMARKS

1. The Pending Claims

Claims 3-5, 21, 23-24, 30 and 34-45 were canceled in the application fee transmittal paper filed together herewith, leaving original claims 1-2, 6-20, 22, 25-29, and 31-33 pending in the application. New claims 46-49 are being added. After entry of the amendment, claims 1-2, 6-20, 22, 25-29, 31-33 and 46-49 will be pending.

2. Amendments

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."